



## RS ZERO BEMU

The Stadler Regio-Shuttle RS1 has been one of the most popular vehicles in German regional rail transport for 28 years. Around 500 vehicles of this successful model are currently in use.

The Regio-Shuttle has helped to create economical, attractive options on local branch lines with low traffic density.

The RS ZERO is based on the Regio-Shuttle RS1, albeit with a fully decarbonised drive.

Thanks to this innovation, Stadler can offer the best of both worlds: it retains the advantages of the tried-and-tested RS1, but integrates the most modern, environmentally friendly drive technologies.

The RS ZERO is a suitable vehicle for non-electrified or partially electrified lines. Its battery drive enables it to travel on non-electrified sections of the line, thus bridging the gap for CO<sub>2</sub>-emission-free operation of local branch lines.

Unlike the RS1, the RS ZERO is available as a one-car or two-car vehicle. The one-car unit with a toilet has space for 67 seats or around 75 seats without a toilet. The maximum number of seats in the two-car unit with a toilet is 150 or 165 without a toilet. The RS ZERO has an impressively large, comfortable low-floor area, which makes it the leading vehicle in this category.

### Stadler Deutschland GmbH

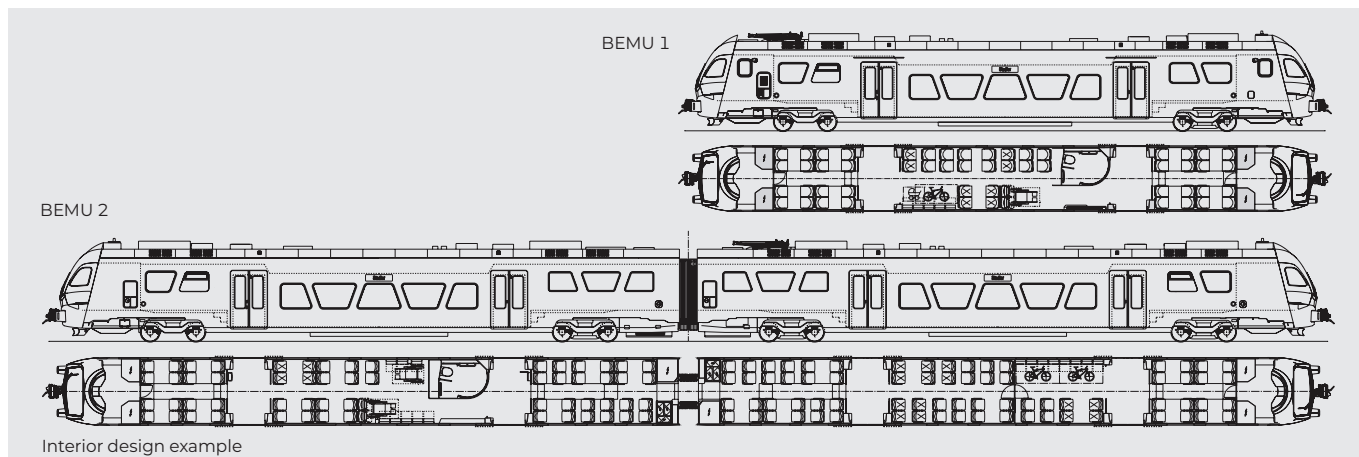
Heinz-Brandt-Strasse 6  
D-13158 Berlin  
+49 30 9191 1616  
stadler.deutschland@stadlerrail.com

### Stadler Rail Group

Ernst-Stadler-Strasse 1  
CH-9565 Bussnang  
+41 71 626 21 20  
stadler.rail@stadlerrail.com

stadlerrail.com

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## Technical features

### Technology

- Operation with or without overhead contact lines thanks to traction battery
- Charging of the traction batteries by overhead line and recovery of braking energy
- Lightweight construction – axle load under 18 t
- One-car and two-car versions

### Comfort

- Large low-floor area suitable for bicycles, pushchairs and wheelchairs
- 2 or 4 passenger doors per side for optimum passenger boarding and alighting
- Variable interior than can be adapted to seasonal requirements
- Air-conditioned passenger compartment
- Sliding steps at all doors
- Optionally with barrier-free toilet

### Personnel

- Driver's cab with large field of vision thanks to large windscreen and side windows
- Air-conditioned and ergonomic driver's cab

### Reliability / Availability / Maintainability / Safety

- High redundancy
- Compliance with all standards and TSI
- EN 15227 C1 and EN 12663 P2
- Fulfills the current requirements regarding crashworthiness and car body strength for standard-gauge railways (EN 15227 and EN 12663)
- Low-wear electric drive

## Vehicle data

<b>Operated networks</b>	Non-electrified local branch lines. EBO/UIC/EN 15273: G1
<b>Track gauge</b>	1,435 mm
<b>Designation</b>	RS ZERO BEMU 1 / BEMU 2
<b>Supply voltage</b>	15kV / 16,7 Hz
<b>Operating voltages (optional)</b>	25 kV / 50 Hz, 1,5 kV DC, 3 kV DC
<b>Max. axle load</b>	< 18 t
<b>Axle arrangement</b>	BEMU 1: (1A)(A1) BEMU 2: (1A)(A1)+(1A)(A1)
<b>Seats incl. tip-up seats (with toilet)</b>	BEMU 1: 67 BEMU 2: 150
<b>Seats incl. tip-up seats (without toilet)</b>	BEMU 1: 75 BEMU 2: 165
<b>Floor height</b>	Low-floor area 600 mm High-floor area 1,190 mm
<b>Entrance width</b>	1,300 mm
<b>Height of entrance above FFL</b>	600 mm
<b>Height of entrance (overall door height)</b>	2,120 mm
<b>Axial thrust</b>	1,500 kN
<b>Length over coupling</b>	BEMU 1: 27,400 mm BEMU 2: 53,140 mm
<b>Vehicle width</b>	2,820 mm
<b>Vehicle height</b>	4,275 mm
<b>Motor bogie</b>	1,900 mm
<b>Driving wheel diameter, new</b>	760 mm
<b>Carrying wheel diameter, new</b>	760 mm
<b>Max. output at wheel</b>	BEMU 1: 600 kW BEMU 2: 1,200 kW
<b>Starting tractive effort</b>	BEMU 1: 70 kN BEMU 2: 140 kN
<b>Max. starting acceleration</b>	0,95 m/s <sup>2</sup>
<b>Max. speed</b>	120 km/h